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EXAMINER

SAUCIER, SANDRA E

ART UNIT

PAPER NUMBER

1651

NOTIFICATION DATE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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info@lmiplaw.com

DETAILED ACTION

Claims 57–61 are pending and are considered on the merits.

Claim Rejections – 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 57–61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Applicant has amended the claims to recite “can be stored for about 7 to 8 days”. However, applicant has not pointed to the place in the specification where support for this new inclusion exists. The examiner has not found support for this recitation in the generic portion of the specification, nor in the examples which do not correspond to the breadth of the claim. The only possible support is in an example on page 31 where the addition of 5 mM L-carnitine to leukoreduced platelet concentrates and subsequent storage @ 22°C for 7 or 8 days is shown. This is far narrower support than is now in the claimed method. First, the concentration of L-carnitine is 5mM, which is not in the claimed method. Second, only L-carnitine is added, not salts or esters or salts of esters. Third, the limit of storage shown is 8 days not about 8 days which permits a undefined variation above 8 days.

Insertion of the limitation explained above has no support in the as-filed specification. The insertion of this limitation is a new concept because it neither has literal support in the as-filed specification by way of generic disclosure, nor are there specific examples of the newly limitation which would show possession of the concept. This is a matter of written description, not a

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question of what one of skill in the art would or would not have known. The material within the four corners of the as-filed specification must lead to the generic concept. If it does not, the material is new matter. Thus, these insertions are considered to be the insertion of new matter for the above reasons.

Please see *Gentry Gallery v. Berkline* 45 U.S.P.Q.2d 1498 for a discussion related to broadening the claimed invention without support in the as-filed specification. Please see *PurduePharma v. Faulding* 56 U.S.P.Q.2d 1481 for a discussion related to a failure to describe a claimed generic concept in the narrative portion of the specification, but rather basing support on limitations in examples.

Claim Rejections – 35 USC § 103

Claims 57–61 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Sweeney *et al.* [AW] in combination with US 5,747,536 [AA] and Ogawa *et al.* [U] and Tegos *et al.*[V].

The claims are directed to a method comprising:
adding L-carnitine or an ester of carnitine or salts thereof to a platelet concentrate which has been leukodepleted and suspending the platelet concentrate in the mixture. The claim also has a phrase which is a capability of the composition to be stored for about 7 to 8 days, but does not add further active steps to the method.

The intent of the claimed methods is the suppression of bacterial growth in the platelet concentrate.

Sweeney *et al.* disclose a method of adding L-carnitine or acetyl-carnitine (5mM) to platelet concentrates and agitating the mixture. This is said to reduce glycolysis in the platelet mixture. Glycolysis impairs the quality of the platelet product.

Tegos *et al.* teach that glycolytic enzymes are present in isolated

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platelets.

Ogawa *et al.* teach the advantages of leukodepleting platelet products with regard to prevention of adverse reactions to PC transfusion and that leukodepleted platelets still possess glycolytic activity.

US 5,747,536 discloses that esters of carnitine other than acetyl ester are known.

The primary reference lacks the disclosure of leukodepleting the platelet concentrate and use of the homologous derivatives of acetyl-carnitine.

The substitution of other esters of carnitine such as butyryl, valeryl, propionyl, isobutyryl for the acetyl ester of carnitine in the method of Sweeney *et al.* would have been obvious when US 5,747,536 was taken with Sweeney *et al.* because US 5,747,536 lists various esters of carnitine and also further discloses the addition of carnitine or its derivatives to platelet concentrates. In the absence of evidence to the contrary, the salts and esters of L-carnitine would reasonably be expected to have a similar activity to L-carnitine or acetylcarnitine because these are simple homologs which may be reasonably expected to have similar properties and activities in the absence of evidence to the contrary.

The substitution of a leukodepleted platelet concentrate for the platelet concentrate of the primary reference would have been obvious because both a nonleukodepleted platelet concentrate and a leukodepleted platelet concentrate comprise platelets, and platelets are known to possess the glycolytic enzymes, see Tegos *et al.* which result in glycolysis during storage. Therefore, even if the leukocytes are removed for advantages known in the art, see Ogawa *et al.*, glycolysis in the preparation would still be expected to occur because platelets perform glycolysis by virtue of having glycolytic enzymes. Thus, the addition of L-carnitine, salts or esters thereof, to a leukodepleted platelet concentrate would be expected to reduce the glycolysis in the platelets and to maintain

platelet quality as taught by Sweeney *et al.*.

Although the applicant has recognized another advantage which would flow naturally from following the suggestions of the prior art, this fact cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Although the intent of applicant's method is different from the intent of the disclosed method, the active step of adding carnitine or an ester of carnitine in the same concentration is the same. Thus, the results of the method, suppression of bacterial growth, would reasonably be assumed to be the same as the result claimed.

It is not relevant to the analysis of the claimed method that the reference makes no mention of suppressing bacterial growth. Discovery of a new benefit for an old process does not render the old process patentable. *In re Woodruff*, 919 F. 2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). Merely because the reference did not have one of applicant's purposes in mind when the (drug was administered) does not alter the drug's physiological activity. In the context of an anticipation rejection, the Federal Circuit stated, "Where, as here, the result is a necessary consequence of what was deliberately intended, it is of no import that the article's authors did not appreciate the results." *Mehl/Biophile Int'l Corp. v. Milgraum*, 192 F. 3d 1362, 1366, 52 USPQ2d 1303, 1307 (Fed. Cir. 1999).

See also *In re Cruciferous Sprout* 64 USPQ2d 1202 Fed. Circuit.

The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. See, e.g., *In re Kahn*, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed.Cir. 2006) (motivation question arises in the context of the general problem confronting the inventor

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rather than the specific problem solved by the invention); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1323, 76 USPQ2d 1662,1685 (Fed. Cir. 2005) (“One of ordinary skill in the art need not see the identical problem addressed in a prior art reference to be motivated to apply its teachings.”); *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991). MPEP 2144IV.

One of ordinary skill in the art would have been motivated at the time of invention to make these substitutions in order to obtain the results as suggested by the references with a reasonable expectation of success. The claimed subject matter fails to patentably distinguish over the state of the art as represented by the cited references. Therefore, the claims are properly rejected under 35 U.S.C. § 103.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a

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nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 57-61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 57-61 of copending Application No. 11/770136. Although the conflicting claims are not identical, they are not patentably distinct from each other because they have the same one step claim of adding L-carnitine and esters or salts thereof to platelet concentrate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments filed 5/4/09 have been fully considered but they are not persuasive.

Applicant argues that the claims have been limited to the unexpected results "the improvement comprising said prestorage-leuko-reduced platelet concentrate can be stored for about 7 to 8 days". However, this is not limiting the claim to the "unexpected" results, it is merely stating that the platelet concentrate is capable of being stored for about 7 to 8 days. Even if applicant were to limit the claimed method to adding 5mM L-carnitine and storing the platelet concentrate @ 22°C for 7-8 days, the active step of adding 5mM L-carnitine or acetyl-L-carnitine to platelet concentrates is exactly what the prior art teaches. One cannot overcome prior art by performing the same or an exceedingly similar step of adding the same compound in the same

concentration to the same platelets or obvious variants thereof absent direct comparison, in a clear, convincing, scientifically correct manner with the prior art method to show that whatever variation may exist is not obvious.

The length of time of storage of a platelet concentrate would also be obvious because there is no evidence that the platelets of Sweeney *et al.* could not be stored for 8 days since the same concentration of the same compound is added to platelets. The fact that applicants extended their period of storage to 8 days, with or without having a storing step in the claimed method, is legally obvious in the absence of a direct comparison with the method of Sweeney *et al.* using the platelet concentrate of Sweeney *et al.* AND a claim commensurate in scope with such a showing.

Applicant argues that a platelet concentrate that can be stored for 8 days is an improvement. However, applicant does not compare the process of the cited primary reference with his process, therefore, the arguments is unpersuasive of error in the construction and application of the rejection.

The arguments are not persuasive because the examiner considers the above rejection to disclose all of the elements of the claimed process, *i.e.* all of the active process steps and the product being acted upon AS CLAIMED and the elements are logically and reasonably linked together, which provides motivation for the combination of references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on

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the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1651. The supervisor for 1651 is M. Wityshyn, (571) 272-0922. The normal work schedule for Examiner Saucier is Monday through Friday.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra Saucier whose telephone number is (571) 272-0922. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, M. Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sandra Saucier/

Primary Examiner, Art Unit 1651